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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/667,482

09/23/2003

Claudio Cavazza

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23117

7590

01/23/2009

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EXAMINER

KIM, JENNIFER M

ART UNIT

PAPER NUMBER

1617

MAIL DATE

DELIVERY MODE

01/23/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/667,482	<b>Applicant(s)</b> CAVAZZA, CLAUDIO	
	<b>Examiner</b> JENNIFER MYONG M. KIM	<b>Art Unit</b> 1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10/30/2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 12-14, 31 and 32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-14, 31 and 32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

The amendment filed October 30, 2008 have been received and entered into the application.

### **Action Summary**

The rejection of claims 12-14 rejected under 35 U.S.C. 103(a) as being unpatentable over Calvani et al. (U.S. Patent No. 5,955,424) is being **maintained** for the reasons stated in the previous Office Action.

The rejection of claims 31 and 32 rejected under 35 U.S.C. 103(a) as being unpatentable over Calvani et al. (U.S. Patent No. 5,955,424) in view of Walker et al. (1982) being **maintained** for the reasons stated in the previous Office Action.

### ***Response to Arguments***

Applicant's arguments filed October 30, 2008 have been fully considered but they are not persuasive. Applicants argue that in from page 7-last 5 lines to page 9- table 3, of the specification of the subject Application, show that the combination of acetyl L-carnitine with propionyl L-carnitine has a synergic effect and that Applicants have amended their claimed directed to the ratio of the two components involved as used in the comparisons to demonstrate synergism, that is a 1:1 ratio. This is not found to be

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persuasive because the “evidence” of alleged synergism is not commensurate in scope with the breadth of the claims. It is well established that a showing of unexpected results generally must be commensurate in scope with the breadth of the claims sought to be patented. See, inter alia, (1) In re Greenfield, 571 F.2d 1185, 1189, 197 USPQ 227, 230 (CCPA 1978) (showing of unexpected results must be commensurate in scope with breadth of claim); (2) In re Kulling, 897 F.2d 1147, 1149, 14 USPQ2d 1056, 1058 (Fed. Cir. 1990) (same); and (3) In re Lindner, 457 F.2d 506, 508, 173 USPQ 356, 358 (CCPA 1972) (same). In this case, it is not clear how the **any dosages in 1:1 ratio** as claimed are correlated with the data shown in Tables 2 and 3. The instant claims are not commensurate in scope with the breadth of the claims because it is drawn to any 1:1 ratio regardless of their therapeutic level. Accordingly, the claims broadly read on amounts that are so small that they do not reach the therapeutic levels and are not commensurate with data showing the therapeutic amounts with ratio 1:1. Therefore, it appears that the claims are not commensurate in the scope with the amounts with the ratio shown in the data. Thus, the claims fail to patentably distinguish over the state of the art as represented by the cited references.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calvani et al. (U.S. Patent No. 5,955,424) of record.

Calvani et al. teach the pharmaceutical composition comprising L-carnitine or an alkanoyl L-carnitine or a pharmacologically acceptable salts thereof, useful as a medicament for inhibiting nephrotoxicity resulting from the administration of an immunosuppressant drug such as cyclosporine-A, tacrolimus, rapamycin and deoxyspergualine. (abstract). Calvani et al. illustrate tests showing carnitine-induced renal protection with administration of **acetyl L-carnitine** or **propionyl L-carnitine**. (see Experimental tests, column 3-6). Calvani et al. teach the effective amount of L-carnitine in two different doses of 2mg/l and 5mg/l.

Calvani et al. do not expressly teach the composition comprising acetyl L-carnitine and propionyl L-carnitine in a single formulation for inhibiting nephrotoxicity.

It would have been obvious to one of ordinary skill in the art to combine acetyl L-carnitine and propionyl L-carnitine in a single formulation for inhibiting nephrotoxicity because Calvani et al. teach that each of the active agents are effective for the such inhibition. One of ordinary skill in the art would have been motivated to combine acetyl L-carnitine and propionyl L-carnitine in a single formulation in order to achieve an expected additive benefit of inhibiting nephrotoxicity as illustrated by Calvani et al. One of ordinary skill in the art would have been reasonably expect that the obvious method would provide kidney protection from a kidney dysfunction/nephropathy caused by nephrotoxic agent (cyclosporine, tacrolimus, rapamycin) because each of the active agents has a renal protective effect as demonstrated by Calvani et al.

Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calvani et al. (U.S. Patent No. 5,955,424) of record in view of Walker et al. (1982).

Calvani et al. teach the pharmaceutical composition comprising L-carnitine or an alkanoyl L-carnitine or a pharmacologically acceptable salts thereof, useful as a medicament for inhibiting nephrotoxicity resulting from the administration of an immunosuppressant drug such as cyclosporine-A, tacrolimus, rapamycin and deoxyspergualine. (abstract). Calvani et al. illustrate tests showing carnitine-induced renal protection with administration of **acetyl L-carnitine** or **propionyl L-carnitine**. (see Experimental tests, column 3-6). Calvani et al. teach the effective amount of L-carnitine in two different doses of 2mg/l and 5mg/l. Calvani et al. teach that **acetyl L-carnitine** or **propionyl L-carnitine** is effective for treating renal toxicity of **tubular lesion** induced by cyclosporin A. (column 4, lines 38-43).

Calvani et al. do not expressly teach providing protection from a tubular necrosis caused by Lithium comprising administering a composition comprising acetyl L-carnitine and propionyl L-carnitine in a single formulation.

Walker et al. teach that lithium therapy is associated with tubular lesion as a nephrotoxicity. (abstract).

It would have been obvious to one of ordinary skill in the art to combine acetyl L-carnitine and propionyl L-carnitine in a single formulation for treating tubular lesion in nephrotoxicity caused by lithium because Calvani et al. teach that each of the active agents are effective for the nephrotoxic related tubular lesion caused by cyclosporin-A

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and because Walker et al. teach that lithium also causes tubular lesion as nephrotoxicity. One of ordinary skill in the art would have been motivated to combine acetyl L-carnitine and propionyl L-carnitine in a single formulation in order to achieve an expected additive benefit of inhibiting tubular lesion of nephrotoxicity due to lithium. One of ordinary skill in the art would have been reasonably expect that the obvious method would provide kidney protection from a kidney dysfunction/nephropathy caused by nephrotoxic agent (lithium) because each of the active agents has a renal protective effect of treating the same nephrotoxic condition e.g. tubular lesion caused by cyclosporine-A. There is a reasonable expectation of successfully treating nephrotoxicity caused by lithium, i.e. tubular lesion because Calvani et al. specifically teaches that the each of active agents are useful for treating tubular lesion that is specific condition of nephrotoxicity.

For these reasons the claimed subject matter is deemed to fail to patentably distinguish over the state of the art as represented by the cited references. The claims are therefore properly rejected under 35 U.S.C. 103.

None of the claims are allowed.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### **Communication**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JENNIFER M. KIM whose telephone number is (571)272-0628. The examiner can normally be reached on Monday through Friday 6:30 am to 3 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.



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/Jennifer Kim/  
Primary Examiner, Art Unit 1617

Jmk  
January 21, 2009